Initial Experience With Digital Breast Tomosynthesis in Screening Mammography

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OBJECTIVE

To compare the recall rates in a screening population undergoing breast tomosynthesis combined with digital mammography with those undergoing digital mammography alone during the first two months of introducing breast tomosynthesis in the breast center.

MATERIALS AND METHODS

Digital breast tomosynthesis was offered to women undergoing screening mammography at the breast center and routine digital (2D) mammography was performed at the breast center and also at 3 other satellite facilities. The recall rates of women undergoing 2D mammography alone at all the facilities were compared to those undergoing combined breast tomosynthesis and 2D mammography at the center. The study included a total of 1799 screening mammograms.

FINDINGS

Of the 1799 screening mammograms interpreted during the study:

- 1475 were 2D mammography alone
- 324 were combined digital breast tomosynthesis and 2D mammography
- Statistically significant reduction in the recall rate:
  - 4.9% (DBT and 2D mammography) and 11.9% (2D mammography)
- Recall rate in the two groups:
  - For calcifications: 2.1% (DBT and 2D mammography) and 3.9% (2D mammography)
  - For masses: 1.5% (DBT and 2D mammography) and 2.7% (2D mammography)
  - For asymmetries: 1.8% (DBT and 2D mammography) and 8.2% (2D mammography)

CONCLUSION

Significant reduction in the recall rate was seen upon the introduction of digital breast tomosynthesis, especially in the recall of asymmetries.

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